

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT (IPER)  
AMENDED CLAIMS**

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Mandrel-Locking Unit For Print Roller Mandrels In A Rotary Printing Machine

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**New Claims**

1. Mandrel-locking unit (1) for a rotary printing machine with
  - a mandrel-mounting element (9) that forms a hollow body and accommodates in an enclosed form in its interior a bearing (11) for mounting a print roller mandrel (13) having a mandrel-supporting surface (12) and that can be slid between a mounting position in which the print roller mandrel (13) is in mesh with the bearing (11) and a release position in which the print roller mandrel (13) is out of mesh with the bearing (11),
  - a pressurizing medium cylinder (2) comprising a pressure chamber (3) and a piston (4) located inside it for sliding the mandrel-mounting element (9) between the mounting position and the release position, where the piston (4) delimits the pressure chamber (3) at a boundary surface and is connected to the mandrel-mounting element (9) at a connecting point for the transfer of the force required for sliding the mandrel-mounting element,

**characterized in**

  - **that** the distance between the boundary surface and the connecting point is smaller than the maximum stroke of the piston (4) in the pressurizing medium cylinder (2),
  - **that** the inner diameter of the pressurizing medium cylinder (2) is larger than the outer diameter of the mandrel-mounting element (9) and
  - **that** the pressurizing medium cylinder comprises a break-through (14) that is open in the release position of the mandrel-mounting element (9) so that the print roller mandrel (13) and the mandrel-locking unit (1) can be separated from one another by a movement in relation to one another.

2. Mandrel-locking unit (1) pursuant to claim 1

**characterized in that**

the distance between the boundary surface and the connecting point is smaller than three quarters of the maximum stroke of the piston (4) in the pressurizing medium cylinder (2).

3. Mandrel-locking unit (1) pursuant to any of the aforementioned claims

**characterized in that**

the distance between the boundary surface and the connecting point is smaller than half of the maximum stroke of the piston (4) in the pressurizing medium cylinder (2).

4. Mandrel-locking unit (1) pursuant to any of the aforementioned claims

**characterized in that**

parts of the mandrel-mounting element (9) can be displaced in the pressurizing medium cylinder (2).

5. Mandrel-locking unit (1) pursuant to any of the aforementioned claims

**characterized in that**

the piston (4) is a disk without a piston rod.

6. Mandrel-locking unit (1) pursuant to any of the aforementioned claims

**characterized in that**

the connecting point between the piston (4) and the mandrel-mounting element (9) has a screwed connection.

7. Mandrel-locking unit (1) pursuant to any of the aforementioned claims

**characterized in that**

the mandrel-mounting element (9) and the pressurizing medium cylinder (2) are shaped as circular cylinders and that their axes of symmetry extend parallel to the distance between one another.